



98079CIPDIV

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(B&W 03259.00020)

Applicants: **Chung et al.** Paper No.:

U.S. Serial No.: **10/051,357** Group Art Unit:

Filed: **January 18, 2002** Examiner:

Title: **Method and Apparatus for Producing and Treating Novel Elastomer Composites**

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Commissioner for Patents, P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT**

In accordance with the provisions of 37 C.F.R. § 1.56 and 1.97, applicant herewith submits the publications and/or patents shown on the attached form PTO-1449, for consideration by the Examiner in connection with the examination of the above-identified patent application. These citations were submitted in parent application U.S. Serial No. 09/549,051 filed on April 13, 2000 and cited in the Search Report for international patent application No. PCT/US00/09925 filed on April 13, 2000.

It is respectfully requested that each of the documents shown on the attached form PTO-1449 be made of record in this application. Copies of these documents (CHECK ONE):

**REMARKS**

In accordance with the provisions of 37 C.F.R. § 1.97, this statement is being filed (CHECK ONE):

   (1) within three (3) months of the **Filing Date** or before the mailing date of the **First Office Action** on the merits; or

X (2) are in the file of parent application Serial No. 09/549,051 filed on April 13, 2000 and cited in the Search Report for international patent application No. PCT/US00/09925 filed on April 13, 2000

It is respectfully requested that each of the documents shown on the attached form PTO-1449 be made of record in this application. Copies of these documents (CHECK ONE):

are enclosed herewith; or

are in the file of related application Serial No. 09/549,051 filed on April 13, 2000 and cited in the Search Report for international patent application No. PCT/US00/09925 filed on April 13, 2000, and are thus not being resubmitted herein.

Early examination and allowance of the present application are respectfully solicited.

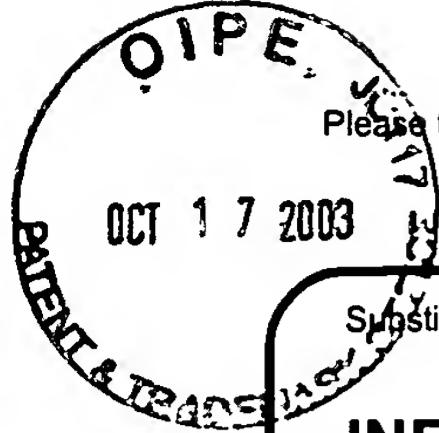
**FEE AUTHORIZATION**

The Commissioner is hereby authorized to charge any fee associated with this document to **Deposit Account No. 19-0733**. Any overpayments should be credited to same Deposit Account.

Respectfully submitted,



Peter D. McDermott  
Attorney for Applicant  
Reg. No. 29,411



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PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of 3

Complete if Known

Application Number	10/051,357
Filing Date	01/18/02
First Named Inventor	Bin Chung
Group Art Unit	
Examiner Name	

Attorney Docket Number 003259.00020

### U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1	1611278		Peterson	Dec., 1926	
	2	1846820		Darling	Feb., 1932	
	3	2769795		Braendle	Nov., 1956	
	4	3048559		Heller	Aug., 1962	
	5	3108982		Barclay	Oct., 1963	
	6	3335200		Thorn	Aug., 1967	
	7	3403121		Hare	Sept., 1968	
	8	3494740		Speck	Feb., 1970	
	9	3623703		Nielander	Nov., 1971	
	10	3695585		Nielander	Oct., 1972	
	11	3767605		Gerlicher	Oct., 1973	
	12	3887532		Nubert	June., 1975	
	13	4025711		Davidson	May, 1977	
	14	4029633		Hagopian	Jun., 1977	
	15	4064093		Dalton	Dec., 1977	
	16	4103074		Hertel	Jul., 1978	
	17	4124550		Kobayashi	Nov., 1978	
	18	4146508		Maxwell	Mar., 1979	
	19	4213957		Hunt	Jul., 1980	
	20	4265939		Tebbens	May., 1981	
	21	4299952		Pingel	Nov., 1981	
	22	4302377		Gurak	Nov., 1981	
	23	4303569		Gurak	Dec., 1981	
	24	4375497		Sandstrom	Mar., 1983	
	25	4446309		Jiroumaru	May, 1984	
	26	4456381		Inoue	June., 1984	
	27	4542992		Markhart	Sep., 1985	
	28	4552725		Audeh	Nov., 1985	
	29	4643890		Schramm	Feb., 1987	
	30	4718771		Asai	Jan., 1988	
	31	4744744		Sugimori	May, 1988	
	32	4771092		Ollenik	Sep., 1988	
	33	4914186		Hilden	Apr., 1990	
	34	4917211		Yamada	Apr., 1990	
	35	4917501		Simonet	Apr., 1990	
	36	5009849		Ebner	Apr., 1991	
	37	5047287		Horiuchi	Sep., 1991	
	38	5119927		Bruggemann	Jun., 1992	
	39	5205972		Kafka	Apr., 1993	
	40	5227425		Rauline	Jul., 1993	

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41	5264290	Touchet	Nov., 1993
42	5328949	Sandstrom	Jul., 1994
43	5430088	Ohashi	Jul., 1995
44	5472928	Schuerman	Dec., 1995
45	5516833	Ohashi	May, 1996
46	5558316	Lee	Sep., 1996
47	5599868	Bohm	Feb., 1997
48	5639817	Probst	Jun., 1997
49	5658657	Tomizawa	Aug., 1997
50	5672006	Hanada	Sep., 1997
51	5733440	Strangeland	Mar., 1998
52	5863117	Gheorghita	Jan., 1999
53	6040364	Mabry	Mar., 2000
54	6048923	Mabry	Apr., 2000
55	6075084	Mabry	Jun., 2000

#### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
56	CH	581493				Nov., 1976		
57	DE	909255				Apr., 1954		
58	DE	1063364				Aug., 1959		
59	DE	1620918				Mar., 1972		
60	DE	3916981				Jul., 1989		
61	EP	051450				May, 1982		
62	EP	0278743				Aug., 1988		
63	EP	0287138				Oct., 1988		
64	EP	0287392				Oct., 1988		
65	EP	0423759				Apr., 1991		
66	EP	0570715				Nov., 1993		
67	EP	0620250				Mar., 1994		
68	EP	0763558				Mar., 1997		
69	GB	705334				Mar., 1954		
70	GB	1421011				Jan., 1976		
71	GB	2098972				Dec., 1981		
72	GB	2196547				May, 1988		
73	JP	57 053340				Mar., 1982		
74	WO	96/37547				Nov., 1996		
75	WO	97/36724				Oct., 1997		
76	WO	99/16600				Apr., 1999		

Examiner Signature	Date Considered
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Group Art Unit	
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### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	Written Opinion dated May 17, 2001 in corresponding PCT/US00/09925	
	2	PCT/US97/05276 International Search Report Patent Family Annex	
	3	PCT/US97/05276 Jan. 13, 1998 Written Opinion	
	4	PCT/US98/20279 Nov. 2, 1999 International Search Report	
	5	PCT/US98/20279 Jan. 20, 2000 Preliminary Examination Report	
	6	Wahab, Shukri Bin Abdul et al., Natural Rubber Carbon Black Masterbatches from Field Latex, pp. 29-41, Proceedings of NR Technology Seminar, Rubber Research Institute of Malaysia, Kuala Lumpur, Malaysia, Dec., 1978	
	7	Database WPI, week 9345, Derwent publications Ltd., London, GB, AN 93-357278, XP002036310 & JP 05 262 918A (Yokohama Rubber Co., Ltd.), Oct. 12, 1993	
	8	“Continuous Mixers for the Polymer Industry” Farrel Corporation Bulletin No. 234-B 1993	
	9	Functionalization of Elastomer by Reactive Mixing by the Malaysian Rubber Producers’ Research Associate, the Common Fund for Commodities, p. 308-312, Research Disclosure, Jun. 1994	
	10	“CP- Series II Compact Processor” Farrel Corporation Bulletin No. 262-C 1995	

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SignatureDate  
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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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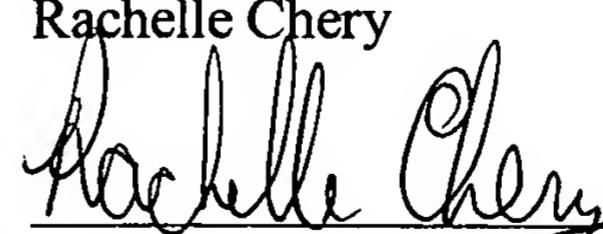
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